

Keynote Speech: Development of Solid Waste Management

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In order to develop the effective technology for the innocent treatment of restaurant garbage and its resource recovery, in the study, a kind of technology for restaurant garbage treatment based on hydrothermal process was studied after the situation of production and treatment of China's restaurant garbage were investigated. Through implementing an U24ý63ý uniform design trial with three factors at six levels on temperature, heating time, and water addition ratio as the main influencing factors of hydrothermal process and analyzing the physicochemical characteristics, this research optimized the process parameters. Then, the impact of the process on the performance of sterilization, deoiling, and dewaterability was studied. It showed that the highest nutrient value of the product appears on condition that the temperature, heating time, and water addition ratio are 120ý, 80 min, and 30%, respectively. Additionally, hydrothermal treatment can kill bacteria thoroughly and affect the dewaterability of the garbage markedly. Furthermore, hydrothermal process improves the deoil performance of the garbage, and the optimal condition for deoil is that the temperature is 160ý and the heating time is 80 min.

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